

Attorney Docket No. 740756-2681

Application No. 10/728,987

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**BEST AVAILABLE COPY****AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Canceled)
2. (Currently Amended) A method for forming a film comprising the steps of:
  - introducing a reactive gas into a reaction chamber;
  - applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;
  - applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and
  - forming the film on a surface of an object in said reaction chamber,wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and  
wherein said film comprises a material selected from the group consisting of carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.
3. (Previously Presented) A method according to claim 2 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.
4. (Currently Amended) A method for forming a film comprising the steps of:
  - introducing a reactive gas into a reaction chamber;
  - applying a pulsed microwave to said reactive gas to convert said reactive gas into a plasma;
  - applying a continuous electromagnetic wave to said reactive gas so that said

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continuous electromagnetic wave is superposed on said pulsed microwave; and  
forming the film on a surface of an object in the reaction chamber using the  
plasma,  
wherein a power value of said pulsed microwave is higher than a power value  
of said continuous electromagnetic wave, and  
wherein said film comprises a material selected from the group consisting of  
carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.

5. (Previously Presented) A method according to claim 4 further  
comprising a step of applying a magnetic field for performing an electron cyclotron  
resonance in said reaction chamber.

6. (Currently Amended) A method for forming a film comprising the  
steps of:  
introducing a reactive gas into a reaction chamber;  
applying a pulsed electromagnetic wave to said reactive gas to convert said  
reactive gas into a plasma;  
applying a continuous electromagnetic wave to said reactive gas so that said  
continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and  
forming the film on a surface of an object in said reaction chamber,  
wherein a power value of said pulsed electromagnetic wave is higher than a  
power value of said continuous electromagnetic wave, and  
wherein a frequency of said pulsed electromagnetic wave is the same as a  
frequency of said continuous electromagnetic wave, and  
wherein said film comprises a material selected from the group consisting of  
carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.

7. (Previously Presented) A method according to claim 6 further  
comprising a step of applying a magnetic field for performing an electron cyclotron  
resonance in said reaction chamber.

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8. (Currently Amended) A method for forming a film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;

applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and

forming the film on a surface of an object in said reaction chamber,

wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and

wherein a frequency of said pulsed electromagnetic wave is different from a frequency of said continuous electromagnetic wave, and

wherein said film comprises a material selected from the group consisting of carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.

9. (Previously Presented) A method according to claim 8 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

10. (Previously presented) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;

applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and

forming the metallic film on a surface of an object in said reaction chamber,

and

wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave.

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11. (Previously Presented) A method according to claim 10 wherein said metallic film comprises a material selected from the group consisting of tungsten, titanium, molybdenum and a silicide thereof.

12. (Previously Presented) A method according to claim 10 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

13. (Previously presented) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed microwave to said reactive gas to convert said reactive gas into a plasma;

applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed microwave; and

forming the metallic film on a surface of an object in the reaction chamber using the plasma,

wherein a power value of said pulsed microwave is higher than a power value of said continuous electromagnetic wave.

14. (Canceled)

15. (Previously Presented) A method according to claim 13 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

16. (Previously presented) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;

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applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and  
forming the metallic film on a surface of an object in said reaction chamber,  
wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and  
wherein a frequency of said pulsed electromagnetic wave is the same as a frequency of said continuous electromagnetic wave.

17. (Previously Presented) A method according to claim 16 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

18. (Previously presented) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;  
applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;  
applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and  
forming the metallic film on a surface of an object in said reaction chamber,  
wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and  
wherein a frequency of said pulsed electromagnetic wave is different from a frequency of said continuous electromagnetic wave.

19. (Canceled)

20. (Previously Presented) A method according to claim 18 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

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21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

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